Pre- and Post-Dredging at a Marine Superfund Site Comparison of Exposure Habitat and Ecological Indicators

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Key Words: contaminated sediments, Superfund, monitoring, ecological indicators

New Bedford Harbor (NBH), MA, is a marine Superfund site due to severely PCB-contaminated sediments. Prior to initial remedial activities, a comprehensive, long-term monitoring program was developed to assess the effectiveness of dredging at this site, both spatially and temporally. Pre-remedial baseline sediment sampling consisted of quantifying a suite of exposure indicators (PCBs, metals, sediment toxicity), habitat indicators (TOC, AVS, grain size) and ecological indicators (benthic community indices) at each of 72 stations along a gradient from the severely contaminated upper estuary to Buzzards Bay. Recently, the first phase of remediation was completed, dredging of a five-acre "Hot Spot," and the full suite indicators were measured again. Pre- and post-dredging comparisons were made for each indicator and are presented in GIS format. This approach will be used during each remedial phase, as well as after completion of all remedial activities, to assess ecological recovery at this Superfund site.